

CENTURYLINK TEACHERS AND TECHNOLOGY GRANTS PROGRAM COMPETITIVE SUB-GRANT PROPOSAL ASSURANCE SHEET

Project Title: Extending Technology School-Wide Using iPads to Engage Content and Mentor Students

Amount of Request: \$ 5,000

Name of Certificated Teacher (or "lead teacher" if more than one): Lisa McAteer

Name of School currently teaching at: Pocatello Community Charter School (PCCS)

District Name: Pocatello/Chubbuck

District Number: #25

Total number of teachers involved (if more than one): Two


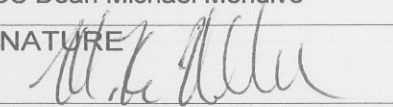
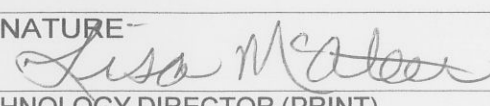
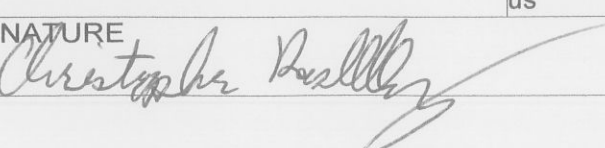
Grade level(s) impacted: 3-4 (directly); K-2 with mentoring

Please list other teachers involved if this is a team application: Christenia Coast (co-lead teacher)

Content area(s) impacted: Reading, Writing, Social Studies, Science, Listening, Speaking (and Math)

I certify that if I receive a CenturyLink Teachers and Technology Program Grant –

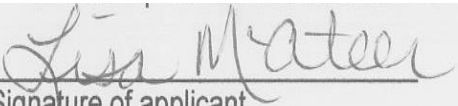
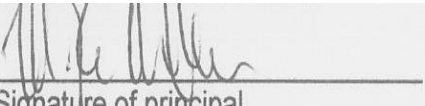
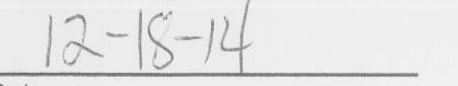
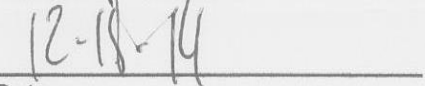
- 1. I agree to create a 5-minute video highlighting my project for the purposes of sharing best practices with other Idaho PreK-12 teachers.**
- 2. I agree to do one presentation on my project to other Idaho PreK-12 teachers before December 31, 2015 (by 5 pm MST).**
- 3. I agree to submit an electronic report to the Idaho State Department of Education on or before December 31, 2015.**

SUPERINTENDENT NAME (PRINT) PCCS Dean Michael Mendive	E-MAIL michael.mendive@pccs.k12.id.us	TELEPHONE (208) 478-2522
SIGNATURE 		12-18-14
PRINCIPAL NAME (PRINT) PCCS Dean Michael Mendive	E-MAIL michael.mendive@pccs.k12.id.us	TELEPHONE (208) 478-2522
SIGNATURE 		12-18-14
TEACHER OR LEAD TEACHER NAME (PRINT) Lisa McAteer	E-MAIL lisa.mcateer@pccs.k12.id.us	TELEPHONE (208) 478-2522
SIGNATURE 		
TECHNOLOGY DIRECTOR (PRINT) Christopher Roskelley	E-MAIL christopher.roskelley@pccs.k12.id.us	TELEPHONE (208) 478-2522
SIGNATURE 		

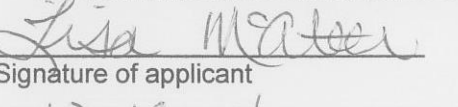
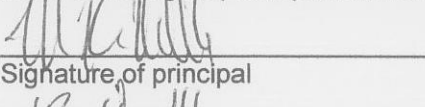
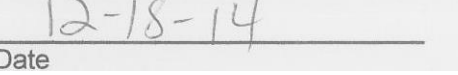
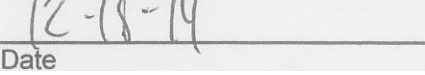
CenturyLink Teachers and Technology Grants Program
Applicant Certification

As an applicant for a CenturyLink Teachers and Technology Grant, you are required to certify the following statements. Please ensure that you work with the necessary individuals within your school or district to ensure that the following statements are accurate.

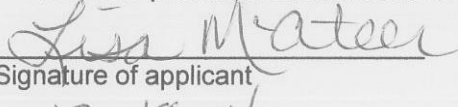
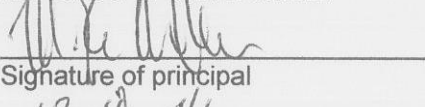
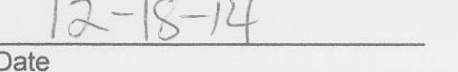
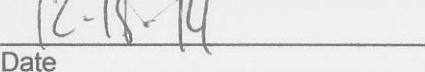
1. 1. After reasonable investigation (such as conferring with the schools' network administrator). The applicant does not anticipate that the proposal, if selected for award, would significantly increase the school's network capacity needs.

 _____ Signature of applicant	 _____ Signature of principal
 _____ Date	 _____ Date

- 1. 2. The applicant is not involved in any procurement decisions regarding the purchase of the school's telecommunications and internet services, including its participation, if any, in the E-Rate program.

 _____ Signature of applicant	 _____ Signature of principal
 _____ Date	 _____ Date

1. 3. The applicant confirms that receiving this grant will have no impact on and will not be considered in E-rate procurement decisions for their school or school district.

 _____ Signature of applicant	 _____ Signature of principal
 _____ Date	 _____ Date

Applicant's Name (please print): Lisa McAteer

City and State: Pocatello, Idaho

School Name: Pocatello Community Charter School

School District: Pocatello Chubbuck School District #25

Extending Technology School-Wide Using iPads to Engage Content and Mentor Students

CURRENT INNOVATION

Innovative projects that we are currently doing in the classroom

Our school (website available upon request) is an innovative public education option for grades K-8 that is supported by skilled professionals and parental involvement. Expeditionary Learning (EL) at our school exemplifies active, challenging, meaningful, public, and collaborative instruction that incorporates personal responsibility, critical thinking, and service learning. "When implemented robustly, Expeditionary Learning core practices (as well as dedicated teachers and much needed technology) create school environments that promote deep engagement in learning and support students to achieve at high levels" (Expeditionary Learning Core Practices: A Vision for Improving Schools, 2011, p 1).

To be successful critical thinkers, problem solvers, communicators, and collaborators in a modern world, students must use technology, often and creatively. We intend to further extend our use of technology school-wide. Last year our teachers in grades 7/8 received this grant. The middle school students are currently mentoring grade 3/4 students using chrome books to create presentations from expository text. This spring, students in grades 7/8 will work again with students in grades 3/4, using chrome books to create presentations on The Lesser Known Mammals of Yellowstone. According to the National Council of Teachers of English, in order to be literate in the 21st century, students must be "proficient with the tools of technology." As students collaborate, the interplay between process and product will result in measurable improvements in computer literacy.

How project relates to innovations in the classroom

This grant will further enhance the use of technology in the lower wing (K-4) of our school, as students in grades 3/4 use iPads to better engage diverse content, develop crucial skills for communication and collaboration, research and create their own projects, and mentor younger students in grades 1/2. The motto for our school is "We are crew, not passengers", meaning that students do not sit around and wait to be told what they should learn; students are advocates for their own learning. Individual differences are fostered as students eagerly collaborate and help each other better understand content. By using iPads students can make their own choices as they dig deeply into content that captivates, learn at their own pace, and use a learning style that best fits their needs. We currently have four iPads in a grade 3/4 classroom. These iPads were recently donated by involved and dedicated parents who, along with our teachers, care deeply about the success of our school and our students. Students vie for time with and use of these iPads because they so enjoy engaging content, using technology that creates a motivating learning environment. Our school is an amazing match for iPad technology. Smart boards can interface with iPads to create interactive classrooms that will engage every student in the classroom with visual imagery and on-line resources that facilitate learning. Without a doubt, all iPads would be utilized to full capacity by eager and energetic young minds.

Our second focus is to collaborate with younger students to develop technology skills needed to create evidence of learning through our portfolio assessment system. We will prepare our younger students for the skills they will need in order to be successful on future state assessments. As students in grades 3/4 strive to assist younger, eager students, who really look up to them, they will become more confident in the knowledge and skills they have gained, and will serve students throughout the school in the process.

How project improves student performance (see also – Anticipated outcomes / impact)

Our assignments and assessments are well aligned with Idaho State Standards and Common Core State Standards. The use of iPads will allow students to gain experience generating products using technology, present their work, and teach younger students; we will be able to demonstrate that students are better prepared on many fronts for upper grades, high school, college, and the job market beyond school. Within limits (other changes that might occur in the same year), the Smarter Balance Assessment (SBA) is a reasonable external measure for assessing improvements in student performance as a result of our innovative practice. Our school just started using STAR (Renaissance Place) more aggressively to monitor student proficiencies in reading and math; we intend to compare scores at the beginning and end of the year. We also intend to use iPads as a tier 2 intervention for students who are determined to be at risk and in need of interventions in reading and math, as assessed using STAR.

PROJECT NARRATIVE

In an Expeditionary Learning (EL) school, students learn content through learning expeditions. Each expedition results in the production of a high-quality product emphasizing multiple drafts through revision, so that students can achieve their personal best and reflect upon what they have learned. Being part of the EL network allows our teachers to collaborate with other educators throughout the country, refine their own teaching practices, and participate as leaders, researchers and curriculum developers within their own school, creating classrooms where teachers can fulfill their highest aspirations and students can achieve more than they think possible. Since 2011, our school has had the distinction of being one of the first EL Mentor Schools in a national network that includes more than 165 schools. In 2013, our school was ranked in the top 10% of EL schools nationally, and received an exemplary performance audit by District X (the Accreditation Association for our school).

The long-term goal for technology at our school is to get computers into the hands of all students on a daily basis for the purpose of improving the computer literacy of our students and preparing them for a world that is increasingly technology-based. In our 2013 Strategic Plan, the Board and administration identified the need to integrate more computer technology into the classroom. A Technology Survey (November 2013) identified the following needs for technology: 1) additional computers for each classroom (enough to provide access to all students in one class simultaneously, even if students have to pair up), 2) more one-on-one time with technology for students, 3) technology training for teachers, support staff, and students to use computers more effectively and efficiently, and 4) more up-to-date technology for administrators, teachers, and support staff. When asked if student needs for technology were being met at our school, 47.4% of respondents indicated “a little bit” and 52.6% of respondents indicated “somewhat” (with none at “quite a bit – a tremendous amount”).

Project description

The need to improve technology and computer literacy among all of our students is paramount. The purchase of iPads will enable students in grades 3-4 to work collaboratively with technology, conduct research on topics related to expeditions, read and generate their own books on topics of interest, use educational applications, and generate electronic products that currently get generated in paper form. Next year, our students will make use of the video-imaging capabilities on iPads to target different standards across disciplines including reading, speaking, listening, and writing. While conducting field work in Yellowstone National Park, they will create video documentaries on the geologic story of the Yellowstone Hot Spot. This project requires students to collaborate using critical thinking skills, communicate by problem solving, and apply their learning using creativity and innovation with technology.

We also intend to capitalize on the knowledge and skills acquired by our grade 3/4 students, who will become leaders and experts in technology in grades K-4. Our students will be able to apply themselves as a mentor and teach what they have learned to younger students. We believe that this is a “win, win” scenario. When you can teach it, you really have learned it. Our intent is to collaborate with grades 1 and 2 to help each student research a selected topic for their Monarch butterfly expedition. This material will be compiled into a published hardback text. Our classroom innovation has the added benefits of enhancing self-esteem and leadership skills, improving behaviors, and providing a stronger, richer sense of community at our school. Based upon our extensive experience with a buddy system, we know that younger students thrive when paired with older students. They will also benefit when technology is shared, easing their transition as they are immersed in more and more technologically advanced classrooms. We consider our innovation to be incremental for the short-term but revolutionary for the long-term, in terms of product, process, and the organization of our school.

Project team members (other teachers, administrators, staff, etc.)

Grade 3-4 teachers, the lead teacher (15 years of teaching experience) and the co-lead teacher (24 years of teaching experience), will dedicate the time required to plan, implement, evaluate, and disseminate this project. They will apply to present a Master Class at the National EL Conference (October 2015). The Dean (credentials available upon request) for our school will provide support and resources to teachers implementing the Century Link Grant. Using a rubric developed in collaboration with the lead teachers, the Dean will observe classrooms to document the level of engagement and how teaching and learning differ when iPads are utilized in the classroom.

Dr. X (PCCS Board member with a Ph.D. in Biology and Education, University of X - credentials available upon request) will serve as an external evaluator, assisting in the analysis of data obtained during the project. The Technology Director will maintain computers and other devices at our school, ensuring that iPads function as expected, and trouble-shooting if and when it is necessary to do so.

Feasibility

The focus for this project is narrow in scope but broad in impact, promoting feasibility. Scoring rubrics permeate the culture for learning at our school, so administrators, teachers, staff, and even students will have no difficulty generating and using them in assessment. Surveys and scoring rubrics will measure the quality of knowledge, skills, and attitudes that students build as they substantially improve their use of technology. The culture for learning and addressing educational change at our school make the implementation of our innovative teaching practice (improving literacy using iPads to create electronic products and mentor younger students) a reasonable next step in generating technologically literate students. It is feasible because we are simply adding technology to what we already do extremely well!

Sustainability

Improvements in literacy are expected to occur gradually, so the use of surveys and rubrics will continue. This proposal represents a second step toward creating a more fluid use of technology throughout the school and optimizing the amount of time students spend using technology to gain necessary knowledge, skills, and attitudes. The grant will improve teaching, learning, and assessment at our school permanently. To fully accomplish our goals, we intend to obtain external funding for additional technology. The findings from Century Link grants should help us to meet the changing needs of our students, and they certainly will optimize our opportunities to seek funding from other sources.

School/District support

Lead teacher one, lead teacher two, the Dean, an external evaluator, and the Technology Director have committed their time and energy to the completion of this project (see team members above). When the Master Class presentation is accepted at the National EL Conference, the Dean has agreed to support registration fees, travel to San Diego, food and lodging.

This year our Board has committed financial resources toward improving technology throughout the school; \$43,000 has been spent to improve our server, network capabilities, and the computers for teachers at our school. The PTO has designated technology as the primary category for fundraising for this spring. Some of the funds raised will support adding projectors and smart boards to any classrooms that do not currently have them. Because iPads can communicate with smart boards, this improvement to the existing technology will further support the use of iPads in our classrooms.

Anticipated outcomes/impact (see also – How project improves student performance)

The Framework for 21st Century Learning (updated in 2009) identifies student outcomes in four broad areas: 1) core subjects and 21st century themes, 2) learning and innovation skills, 3) information, media, and technology skills, and 4) life and career skills. Our innovative teaching practice addresses each of these outcomes through the interplay between process and product, and a mentoring component. Last year, mentoring was pivotal to our teaching and learning; we anticipate it continuing to enhance the use of technology throughout our school. Qualitative outcomes will be assessed based upon how increased and effective use of technology impacts not only literacy but student attitudes and school culture, especially through the implementation of our mentoring program. Pre/post surveys and newly developed rubrics will quantify the extent to which literacy, self-esteem, behavior, leadership, and sense of community change. The data will inform decisions on revisions required to achieve desired outcomes in subsequent years. There is no doubt that these outcomes are achievable, and markedly different from what we have been able to accomplish with our existing technology and infrastructure for technology. The impact of our classroom innovation will occur because we are making the decisions to: 1) put technology into the hands of our students on a daily basis; 2) formalize the process through which students can learn knowledge and skills related to computer literacy; 3) allow students to apply what they have learned by creating their own targeted electronic pieces; 4) make a substantial change in the sense of community and culture of our school by mentoring and teaching computer literacy to younger students; and 5) expedite the speed with which technology can become part of the framework for learning within our school.

PROJECT SCOPE AND SEQUENCE

Objective 1 – Create support systems to use technology more effectively at our school (protocols – use/storage; training - teachers, staff, and students; development - new evaluation / assessment criteria)

Objective 2 – Design and implement instruction on using iPads; use knowledge and skills developed to transform low-tech products into high-quality electronic pieces for instruction and collaboration.

Objective 3 – Capitalize on computer literacy knowledge and skills acquired by older students who will benefit through the process of teaching technology to younger students (use existing buddy system).

Objective 4 – Demonstrate measureable gains in literacy, self-esteem, behavior, sense of community, and leadership, using new rubrics to assess electronic pieces (grades 3 and 4), and simpler rubrics to assess literacy, sense of community and documented research (grades 1 and 2).

Planning – Tasks/Action Items (May – August 2015)

- Purchase iPads, Apple TV, storage cart, access point, and software; create protocols for use/storage
- Generate pre/post surveys; develop checklists for use by students (to ease the transition)
- Prepare instruction on using iPads (key tools and functions; selected applications)
- Modify/redesign rubrics for use with iPads, electronic pieces, buddies, and projects with buddies
- Develop informed consent forms to obtain permission to release student performance data without identification of individual students by name

Implementation/Dissemination – Tasks/Action Items (September – October 2015)

- Administer pre surveys
- **Milestone:** Teach students how to use iPads
- Select topics/projects for instruction with iPads; create electronic pieces
- Transform selected pieces from paper to electronic format using knowledge and skills acquired during instruction on using iPads (reference rubrics to ensure work meets or exceeds each criterion on the rubric)
- Collaborate with other students, presenting electronic pieces using appropriate technology
- Gather data and prepare presentation(s) and report on innovative teaching practice
- **Milestone:** Implement mentoring program (target grades 1-2); assess progress in teaching students in grades 1/2 how to use iPads

Evaluation/Reporting - Tasks/Action Items (November – December 2015)

- Administer post surveys; gather data and report findings
- **Milestone:** Generate and disseminate 5-minute video on innovative teaching practice
- **Milestone:** Make presentation(s) on innovative teaching practice
- **Milestone:** Complete and submit electronic report to SBOE by December 2015

Re-Implementation/Re-Evaluation - Tasks/Action Items (January – May 2016)

- **Milestone:** Complete Video documentaries (grades 3/4) on the geologic story of the Yellowstone Hot Spot (needs to be completed in the spring to accompany field work in Yellowstone)
- **Milestone:** Complete mentoring with students in grades 1/2, as they research and document their topics for the butterfly expedition (needs to be completed in the spring when students have sufficient knowledge on butterflies)
- Administer post surveys; continue re-evaluation process (May 2016 - beyond)

BUDGET NARRATIVE

Currently, student use of computers in the computer lab is not optimal because the computers are older, inadequate, used by the entire school, unable to accommodate all students in one classroom at the same time, and immobile. Although the use of chrome books acquired through the 2013-2014 Century Link grant has improved daily computer use in grades 7/8, most students have limited access to computers on a daily basis. Because students need to be able to type faster for the new Smarter Balance Assessment, typing classes are being conducted in the computer lab several days a week, effectively eliminating the availability of the computers for other purposes at these times. No more than 7 computers are available for use by 184 students in classrooms in the lower wing of the school (grades K-4). These factors negatively impact student opportunities to develop and hone their knowledge and skills with technology.

iPad minis – The device of choice for our younger students is the iPad mini because they have touch screen capabilities for little hands to manipulate, they are relatively cost effective (especially the minis, which have slightly smaller screens with comparable functionality), and they are able to withstand rigorous use by younger students. These devices also require minimal space, and have a decent processing speed, excellent anti-virus protection, and access to a diverse range of free and relatively inexpensive educational applications. Resources, like iTunesU and Apple.com/education, will enable us to develop the knowledge and skills necessary to use iPads effectively with our students, select templates for courses or create our own courses for use by students, and select educational applications by subject area (vetted by Apple). The fact that Apple offers this free on-line support for teachers and students provides opportunities for much needed professional development, while minimizing the time investment necessary to generate effective instruction for our students. Students benefit as they utilize the instructional materials that we generate, and as they develop the literacy necessary to develop products on their own and for use with other students. The use of iPads will also result in less paper being wasted, which is environmentally friendly and important at our school.

Apple TV – The purchase of one Apple TV will enable us to link iPads to Promethean or Smart boards, which will be available in all classrooms by the end of this school year (technology is the main focus for our spring school-wide fundraiser). Projecting images from individual iPads will further facilitate classroom instruction because what one student displays on an iPad can be viewed by all students. This will result in thought-provoking discussions and possible revisions to thoughts and ideas by all students!

iPad storage cart – The cost for an iPad storage cart that is well designed (enclosed, protected metal unit with designated storage slots for each iPad) is high. We believe that the cost of the more expensive cart that charges all units simultaneously (so ready for use each day) is justified and will be of long-term benefit to our school because space will be optimized for future iPad purchases. The cart will also allow iPads to be moved from classroom to classroom, minimizing the risk of damage to iPads and optimizing their use throughout the school.

Access Point – We have determined that access points provide the best security, and will better support the simultaneous use of many devices (load). So, this fall our school installed three access points, located throughout the school. They were donated by the family of the Chair of our Board. In order to ensure that we maintain adequate network connectivity, we will add access points as we increase the load on our system. Therefore, we are requesting funds to purchase an additional access point to support the use of iPads purchased for this grant.

Software – Many free applications for iPads are available and have been recommended by Apple. We have summarized the software that we intend to purchase for the iPads in a separate table that specifies costs in the Budget Spreadsheet. Inspiration, Kidspiration and Story Buddy are particularly useful applications for young students with limited reading capabilities; these applications will help 1st and 2nd graders use pictures and visual imagery to tell a story and generate a research document. DropBox will allow students to capture and move images and other data/media as they generate their own electronic pieces. VoiceThread is a powerful application that will permit students to transform media into collaborative spaces with video, voice, and text. VoiceThread will help students to build strong reading, writing, and thinking skills as they generate innovative products. This software is crucial to our success!

BUDGET SPREADSHEET

Activity	Materials and Supplies	Capital Objects	Quantity	Price/Unit	Sub-Total
Product Development		iPad Mini* AppleBJ794LL/A 7.9" diagonal	10 (bulk) 3 (regular)	\$234 \$239	\$3,057
Link iPads for Classroom Use		Apple TV*	1	\$99	\$99
Media Storage and Charging		iPad Storage Cart Staples - Luxor 350249*** (30 devices)	1	\$565	\$565
Support Network Connectivity		Access Point	1	\$600.00	\$600
Total Applications for iPads**	All software**		as specified below**	Variable**	\$679
				Grand Total:	\$5,000.00

*Equipment will be purchased on-line from Apple with an educational discount. Apple ships for free and engraves devices (to prevent theft) at no additional cost.

** The cost for iPad applications (below) exceeds the budgeted amount (above) by \$482.57; this amount will be funded using other sources. The table below provides unit, sub- total, and total costs on selected applications, including breakdowns based upon licensing. Teachers can apply to the PTO for grants, and they each have a fund for classroom expenses that can be applied to cover costs for applications that exceed the maximum expenditure for this grant.

*** Shipping is free through Staples.

Application for iPads	Quantity	Price/Unit	Sub-Total
DropBox and eBooks	13 each	Free	\$0.00
VoiceThread (Single Educator License)	1	\$79.00 (Per year - for 50 students)	\$79.00
VoiceThread (for # of students beyond 50)	22	\$2.00	\$44.00
Story Buddy	13	\$2.99	\$38.87
Inspiration (10 devices)	1	\$380.00	\$380.00
Inspiration (added devices)	3	\$39.95	119.85
Kidspiration (10 devices)	1	\$380.00	\$380.00
Kidspiration (added devices)	3	\$39.95	119.85
Grand	Total	For Software:	\$1,161.57